

or two stalkings, it flew when rising, apparently from clumsiness, towards me instead of away, and thus ended its career. The specimen I took on the prairie I observed settle on a flower-head—of what species I know not—a habit I have never yet observed in either *Jutta*, *Alberta* or *Varuna*. The ♂♂ agree fairly well with my *Californica*, except that both primaries and secondaries are broader and more rounded, the sex marks absent, and the primaries have two ocelli, rarely a trace of a third, whereas my *Californica* have only one; and the ground colour of the under side of secondaries is paler, and the band more contrasting. My only explanation of the fact that I have not met with it here before this year, is that it must be very erratic in appearance, as so conspicuous a butterfly is not easily overlooked. I should be glad to hear something about it from those who have taken it at Nepigon.

A NEW PLANT LOUSE ON TOBACCO.

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Dr. L. O. Howard, who is preparing a general article on the subject of insects affecting tobacco, for the Year Book of the U. S. Department of Agriculture for 1898, has called my attention to a plant louse feeding upon tobacco plants grown on the grounds of the Department, which he wishes to mention specifically in his article, and since it is a new species, at his request, I submit for publication the following description.

I had been familiar with this undescribed species since 1897, and had found it on the grounds of the Department of Agriculture in smaller colonies on *Rumex crispus*, *Leucanthemum vulgare*, *Forsythia viridissima*, and also on the leaves of the apple, pear, and egg-plant. Specimens have also been received from Mt. Holly, Md., where they were reported to feed in immense numbers on the tomato plant.

NECTAROPHORA TABACI, new species.

Winged Viviparous Female.—Length of body, 2.8 mm. to 3 mm.; expanse of wings, about 8 mm.; length of antennæ, 3 to 4 mm. Colour yellowish-green and faintly pruinous, with the median line and lateral margins of the abdomen more or less distinctly darker. Head, thoracic lobes and sternal plate light brownish and polished; the anterior angle of the median lobe and posterior angle of the scutellum frequently black. Eyes brown; ocelli colourless, margined at inner side with black. Antennæ black, reaching considerably beyond the tip of the tail, the two basal joints pale, dusky or with a greenish tinge, extreme base of third

joint pale greenish. Legs rather long and slender; femora pale greenish at base, shading gradually from brown to black at the apex; coxæ pale greenish; tibiæ dark yellowish, their apex and the tarsi black. Nectaries long and slender, slightly stoutest at base, about two-thirds the length of the femora, reaching beyond the tip of the tail, and of a black colour, with their basal fourth or less, pale greenish. Tail about one-fourth the length of the nectaries, curved upwards, densely covered with minute spines, and provided with a few rather long and fine hairs along the edges; green, changing gradually to dusky towards the end. Rostrum short, not reaching to the median coxæ, pale dirty yellowish, the last two joints brown or black. Wings transparent, iridescent; the subcosta faintly yellowish or greenish, its base more or less distinctly yellow; stigma pale greenish, and with a pale dusky shading along the outer and inner margin; costa and veins slender and black.

The antennæ are apparently without any sensoria, but are provided with a few short and capitate sensorial hairs; those of the tibiæ are quite numerous and slightly enlarged at the tip.

Apterous Female.—Length, 4 to 4.4 mm. to the tip of the tail. Coloration as in the winged form, though more distinctly pruinous; head yellowish; coxæ and femora pale bluish-green, their apex black; tail pale green or frequently yellowish. Hairs of antennæ and legs as in the winged form. The larvæ, and especially the pupæ, are distinctly pruinous, giving to them a whitish appearance in a certain light. The younger larvæ are yellowish, with antennal joints three and four white, tipped with black. Pupæ pale yellowish-green, head and thorax pale greenish, the wing-pads almost white, and with a dusky streak near inner edge; coloration of antennæ as in the larvæ; femora very pale greenish, the tibiæ pale yellowish, with the apex black.

THE HESSIAN FLY ATTACKING TIMOTHY.

When examining some stems of timothy grass taken from a wheat field in Prince Edward Island, where this year's crop had been badly infested with Hessian Fly, I found two of the stems of timothy which bore the undoubted flax-seed-like puparia of the Hessian Fly. There was only a single puparium on each stem, and these were at the second joint from the root, lying inside the sheathing base of the leaf close above the knot. The Hessian Fly is recorded as attacking timothy in Russia, but I do not recall any record of similar work in America.

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